

REMARKS

Claims 1, 2, 5-13 and 16-20 remain rejected under 35 U.S.C. § 103(a).

Claims 1 and 10 are currently amended, and claims 5 and 16 are cancelled without prejudice or disclaimer to the subject matter therein.

Claims 1, 2, 6-13 and 17-20 remain pending in the application. Applicant respectfully requests reconsideration and allowance of each pending claim in view of the following remarks.

Rejections under 35 U.S.C. § 103

Applicant respectfully submits that a *prima facie* case of obviousness is not established in this case. Moreover, even if a *prima facie* case of obviousness was established, it would be rebutted by secondary evidence of nonobviousness.

A. Harada et al.

In the previous Office Action, the Examiner indicates that claims 1 and 3-9 are rejected as being unpatentable over Harada et al. (U.S. Patent No. 6,150,469). The Examiner correctly recognizes that Harada et al. fails to disclose that less than 50% of the functional groups of the polymer are sodium neutralized, as recited in the present claims. Office Action, page 2. However, the Examiner asserts that "it would have been an obvious matter of design choice to have less than 50% of the functional groups be sodium neutralized, since the applicant has not shown that less than 50% neutralization, rather than 50% neutralization solves any stated problem or serves any particular purpose." Office Action, page 2. Further, the Examiner alleges, that "a *prima facie* case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties." Office Action, page 7.

Although Applicant respectfully submits that the original claims are unobvious over the cited references for the reasons previously argued, Applicant nonetheless amends the claims herein purely in the interest of furthering the prosecution of this case. In particular, Applicant amends the claims to recite an underneutralized superabsorbent polymer in which *at least about 60%* of the functional groups of the polymer are in free acid form and less than *about 40%* of the functional groups of the polymer are sodium neutralized. There is no suggestion in the reference of any benefit in modifying the range disclosed in the reference to that recited in the present claims. Accordingly, the present claim amendment clarifies that the reference is deficient and a *prima facie* case is not established.

Even if a *prima facie* case was established, it would be overcome by the unexpected results provided by the claimed invention. In particular, the Examiner's attention is directed to Table 1 of Example 1 on page 12 of the present specification, as provided below for the Examiner's convenience (with emphasis added).

Table 1

| Sample No. | Superabsorbent Polymer Type | Ion Exchange Material Type | Ion Exchange Material (g) | AUL Value (g/g) |
|---------------|------------------------------|----------------------------------|--|-----------------|
| Comparative 1 | SAP IM 4500 - 35 % Free Acid | n/a | n/a | 14.30 |
| Comparative 2 | SAP IM 4500 - 35 % Free Acid | Dowex 50W-X8 / Amberlite IRA-400 | 7.5 (H ⁺) / 7.5 (OH ⁻) | 18.60 |
| Comparative 3 | SAP IM 4500 - 35 % Free Acid | Dowex 1-X8 | 7.5 | 18.14 |
| 1 | SAP IM 4500 - 35 % Free Acid | FloMag HAC-P - rehydrated | 7.5 | 19.19 |
| 2 | HSAP-40 - >35 % Free Acid | FloMag HAC-P - rehydrated | 7.5 | 19.28 |

The specification explains the results in the Table as follows: "As the results in Table 1 demonstrate, it was unexpectedly found that the combination of a preferred LDH anionic clay with either a SAP comprised of an estimated 35 % (Sample 1) or an

estimated 60 % (Sample 2) free acid content results in surprisingly superior AUL values when compared to superabsorbent compositions containing a uSAP alone (Comparative Sample 1).” It should be noted that Sample 2 with an estimated 60% free acid content provides the highest AUL value. Specification, page 12, lines 2-6. Thus, the results provided by the present invention are unexpected and sufficient to rebut a prima facie case of obviousness.

Moreover, Applicant directs the Examiner’s attention to the cited reference which teaches that “it is preferable that 50 mol %-90 mol % of acidic groups in the crosslinked polyacrylic acid/salt are neutralized. This teaching constitutes a teaching away from the claimed invention which recites that less than 40% of the groups are neutralized. It is well established that “a prima facie case of obviousness may also be rebutted by showing that the art, in any material respect, teaches away from the claimed invention. MPEP 2144.05 III (8th Ed. Rev. 2) (citing *In re Geisler*, 116 F.3d 1465, 1471, 43 USPQ2d 1362, 1366 (Fed. Cir. 1997)). Therefore, even if a prima facie case of obviousness was established, it would be rebutted by the foregoing teaching away in the reference.

In view of at least the foregoing, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection and allow all pending claims.

B. Harada et al. in view of Jones, Sr.

Claims 2 remains rejected under U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,150,469 to Harada et al. in view of U.S. Patent No. 3,794,034 to Jones, Sr. In particular, the Examiner asserts that “Harada discloses all aspects of the claimed invention, but remains silent as to the pH range of 3.5 to 6.0” and “Jones discloses an absorbent article having a pH in the range of 3.5 to 6.0.” Office Action, page 3.

In view of the foregoing discussion with regard to the Harada, it is apparent that Harada is deficient in its teachings. Jones fails to remedy the deficiencies of Harada

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because it also fails to teach or suggest the claimed polymer (and certainly does not overcome the teaching away by Harada). Therefore, the references in combination do not teach or suggest all the elements of the claims.

In view of at least the foregoing, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection.

C. Harada et al. in view of Masaki et al.

Claims 10-12 and 14-20 are rejected under U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,150,469 to Harada et al. in view of U.S. Patent No. 5,821,179 to Masaki et al. In particular, the Examiner asserts that "it would therefore be obvious to one of ordinary skill in the art at the time of the invention to produce an absorbent article comprising the superabsorbent composition of Harada with the structure taught by Masaki to reduce gel blocking of the superabsorbent composition." Office Action, page 5.

In view of the foregoing discussion with regard to the Harada, it is apparent that Harada is deficient in its teachings. Jones fails to remedy the deficiencies of Harada because it also fails to teach or suggest the claimed polymer.

Masaki fails to remedy the deficiencies of Harada because it also fails to teach or suggest the polymer recited in the composition (and certainly does not overcome the teaching away by Harada). Therefore, the references in combination do not teach or suggest all the elements of the claims.

In view of at least the foregoing, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection.

D. Harada et al. in view of Masaki et al. and Jones, Sr.

Claims 13 is rejected under U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,150,469 to Harada et al. in view of Masaki et al. and Jones, Sr. In particular,

the Examiner asserts that "it would therefore be obvious to one of ordinary skill in the art at the time of the invention to produce an absorbent article comprising the superabsorbent composition of Harada with the structure taught by Masaki to reduce gel blocking of the superabsorbent composition." Office Action, page 5.

In view of the foregoing discussion with regard to the Harada, it is apparent that Harada is deficient in its teachings. Jones fails to remedy the deficiencies of Harada because it also fails to teach or suggest the claimed polymer.

Masaki fails to remedy the deficiencies of Harada because it also fails to teach or suggest the polymer recited in the composition (and certainly does not overcome the teaching away by Harada). Therefore, the references in combination do not teach or suggest all the elements of the claims.

In view of at least the foregoing, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection.

CONCLUSION

For at least the reasons outlined above, Applicant respectfully submits that the application is in condition for allowance. Favorable reconsideration and allowance of the pending claims is respectfully solicited. Further, Applicant also requests that the Examiner acknowledge the Information Disclosure Statement filed on April 30, 2001 in the next Office Action.

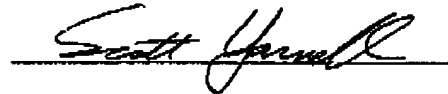
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Should there be anything further required to place the application in better condition for allowance, Examiner Anderson is invited to contact Applicant's undersigned representative at the telephone number listed below.

Respectfully submitted,

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